Focus

Internal Oil Transfers

Definition

Internal Transfers are the movement of liquid cargo, fuels, lubricants, slops, dirty ballast, oily bilge water, or hydraulic fluids from one tank to another within the hull of the ship. Internal transfers most frequently involve petroleum products.

Internal transfers include movements from:

- Cargo tank to cargo tank;
- Fuel tank to fuel tank;
- Cargo tank to slops tank;
- Bilge to holding tank; and
- Fuel tank to service tank or settler tank.

Common Problems

Internal Transfers are often done routinely as an on-watch function, and therefore may not be given the same level of care and attention as transfers of petroleum cargo or bunkers over the rail of the ship. Too frequently this results in a tank overflow and discharge. The following are problems that typically lead to a discharge or close-call during an internal transfer:

Planning

- No clear delegation of duties.
- Too many duty distractions. Lack of time dedicated exclusively to transfer.
- No plan or standard operating procedure for the transfer.
- Miscommunication or misunderstanding about which tanks are to be filled or emptied.
- Unqualified or untrained personnel assigned to the task with little or no supervision.
- Misjudging the receiving tank capacity or supply tank liquid volume.

Execution

- Insufficient personnel.
- Inadequate tank level gauging during transfer.
- Insufficient supervision of transfer by the person in charge.
- Valve misalignment.
- Miscommunication between watch standers or watches.
- Transfer rate underestimated or undetermined.

Follow-up

- No documentation that transfer occurred, or transfer volume recorded incorrectly.

Precautions

The best general precaution against internal transfer spills is to treat them with the same level of care and respect given other over-the-rail liquid cargo or bunker fuel transfers.

Below is a suggested checklist for internal transfers. It is a good idea to create a checklist for **any** transfer of oil, oil product, or oil-tainted water. Such checklists may be combined, and the person in charge may use sections that apply to the type of transfer being conducted.

INTERNAL TRANSFER CHECKLIST

TIME COMPLETED	BEFORE TRANSFER	INITIALS
	Transfer plan completed by person in charge (PIC). Dedicated transfer team selected from crew.	
	Qualified crew assigned transfer duties, including deck rover watch. On-coming watch standers assigned duties.	
	Training session conducted for crew members with transfer duties. Supervisor assigned to new crew members.	
	Piping diagrams and checklists posted and provided as needed.	
	Procedures for watch change discussed.	
	Valve and vent systems aligned and checked by PIC.	
	Emergency shutdown and response procedures discussed.	
	Transfer, communication, and level alarm systems tested.	
	Ullages/tank levels checked, re-checked, and recorded.	
	Pollution prevention equipment in place (scupper plugs, etc.).	
	Other departments notified of transfer.	
	DURING TRANSFER	
	Changes to tank and valve alignment verified and approved by PIC.	
	Transfer started at low flow rate.	
	Flow rates, pressures, and tank levels monitored and checked against plan.	
	Periodic communication checks made.	
	Flow rate slowed when topping off tank(s).	
	Transfer completed.	
	AFTER TRANSFER	
	Valves and vent system set. Inert gas integrity maintained.	
	Re-checked and logged final tank levels in Engine Room Log & Oil Record Book. Levels compared with transfer plan. No liquid movement.	
	Secured from transfer operation. Other departments notified.	

If you have special accommodation needs, contact Mariann Cook Andrews at (360) 407-7211 (Voice) or (360) 407-6006 (TDD).